

REMARKS

This amendment is responsive to the Office Action dated March 13, 2006. Applicant has added claims 25 and 26. Claims 1-26 are pending.

Claim Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1, 3, 5, 7, 9, 10, 11, and 18-24 under 35 U.S.C. 103(a) as being unpatentable over Larson (USPN 6,321,233) in view of Chan et al. (USPN 5,822,772). The Examiner also rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Larson in view of Chan and in further view of Snyder, II (USPN 6,189,083), claim 20 over Larson in view of Chan and in further view of Ng (USPN 5,341,351), claim 21 over Larson in view of Chan and in further view of Hoang et al. (USPN 6,026,469), claim 22 over Larson in view of Chan and in further view of Zuravleff et al. (USPN 5,737,547) and claim 24 over Larson in view of Chan and in further view of Morrow (USPN 2003/0046472). Applicant respectfully traverses the rejections. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

Claims 1, 3, 5, 7, 9, 10 and 11

Independent claim 1 recites a method comprising (a) assigning a unique tag for each of several data access commands, and (b) designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag. Larson and Chan collectively fail to disclose designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag, as recited in claim 1.

The Examiner indicated that Larson at column 9, lines 64-67 and column 10, lines 1-5 discloses designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag. However, in column 9, lines 64-67 and column 10, lines 1-5, Larson merely discloses the use of a tag to determine "the relative age of the pending read and write requests." To the extent Larson differentiates between read tags and write tags, the tags themselves are not used to designate an execution mode.

In reference to FIG. 3 of Larson, request reception circuitry 94 separates read and write requests to be stored in separate FIFOs 62 and 64 (FIG. 4) of request queue 92.¹ As shown in FIG. 4, the separation of requests into separate inputs: “read requests (in)” and “write requests (in)”, occurs before age tags are created in write age FIFOs 66 and 68. In Larson, the location of a request, not a tag, is used to distinguish between read and write requests. Tags are merely used to distinguish the relative age of pending read and write requests.² For at least this reason, Larson fails to disclose designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command’s tag as recited by claim 1.

The Examiner has not asserted that Chan discloses or suggests designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command’s tag. Indeed, Applicant finds no support for such a feature in Chan.

Because Larson and Chan each fails to disclose or suggest designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command’s tag, the combination of Larson and Chan would not have made the subject matter of claim 1 obvious at the time of the Applicant’s invention.

Dependent claims 3, 5, 7, 9, 10 and 11 are patentable over the applied references for at least the reasons independent claim 1 is allowable over the applied references. In light of the clear differences between the applied references and the invention as claimed in claim 1, Applicant reserves further comment with respect to dependent claims 3, 5, 7, 9, 10 and 11. Applicant request withdrawal of the rejection of claims 1, 3, 5, 7, 9, 10 and 11.

Claims 18-24

Independent claim 18 recites an electromechanical device comprising “a controller configured to determine which of a plurality of queue execution modes to use for a selected one of the pending data access commands based on the selected command’s tag.” For similar reasons as discussed with respect to claim 1, Larson and Chan fail to teach or suggest a controller configured to determine which of a plurality of queue execution modes to use for a selected one of the pending data access commands based on the selected command’s tag. For example, in

¹ Larson, column 5, lines 14-16.

contrast to the invention as recited in claim 18, Larson discloses distinguishing between read and write requests prior to assigning an age tag to a request.

Dependent claims 19-24 are patentable over the Larson and Chan for at least the reasons independent claim 18 is allowable over the cited Larson and Chan. Furthermore, the additional references applied in the rejections of claims 19-22 and 24 fail to overcome the deficiencies of Larson and Chan with respect to claim 18. In light of the clear differences between the applied references and the invention as claimed in claim 18, Applicant reserves further comment with respect to dependent claims 19-24. Applicant request withdrawal of the rejection of claims 18-24.

For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant's claims 1, 3, 5, 7, 9, 10, 11, and 18-24 under 35 U.S.C. 103(a). Withdrawal of this rejection is requested.

New Claims

Applicant added claims 25 and 26 to the pending application. The applied references fail to disclose or suggest the inventions defined by Applicant's new claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions. As one example, the references fail to disclose or suggest wherein the plurality of queue execution modes includes at least a standard mode and a video mode. No new matter has been added by the new claims. Support for claims 25 and 26 may be found from, e.g., original claim 16.

Allowable Subject Matter

In the Office Action, the Examiner indicated that the subject matter of claims 2, 4, 6, 8, and 12-15 is allowable. The Examiner also indicated that claims 16 and 17 are in condition for allowance. In this amendment, Applicant did not amend any of claims 2, 4, 6, 8, or 12-17 or any claims on which those claims depend. Therefore, the subject matter of claims 2, 4, 6, 8, and 12-15 remains allowable, and claims 16 and 17 remain in condition for allowance.

² Larson, column 5, lines 22-26.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims.

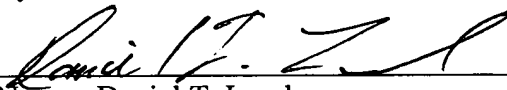
Applicant has included a check in the amount of \$220.00 to cover the cost of two additional dependent claims and a one-month extension of time. Please charge any additional fees or credit any overpayment to deposit account number 50-1778.

The Examiner is invited to telephone the below-signed attorney to discuss this application.

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July 10, 2006
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